

Amendments to the Claims

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims

1-15. (Canceled)

16. (Currently Amended) A method for detecting an object in an area, comprising:
capturing a reference image of the area without the object present, wherein the area includes an intentionally patterned background with both light areas and dark areas, wherein the light areas and dark areas have an intended interrelationship;
capturing a live image; and
determining if the object is present by comparing the reference image and the live image.

17. (Currently Amended) A method according to claim [[1]] 16 wherein the area is at least part of a larger area.

18. (Currently Amended) A method according to claim [[2]] 16 further comprising at least one other area that at least partially overlaps the area, and the method further includes the step of determining if the object is present in the at least one other area by comparing the reference image and the live image.

Appl. No. 10/757,674
Response Dated July 11, 2006
Reply to Office action dated April 11, 2006

19. (Currently Amended) A method according to claim 17 wherein the larger area at least partially encircles an area to be monitored.

20. (Currently Amended) A method according to claim 17 wherein the larger area corresponds to an area to be monitored.

21. (Currently Amended) A method according to claim 16 wherein the area corresponds to a monitored area.

22. (Currently Amended) A method according to claim 16 wherein the area is a mask window.

23. (Currently Amended) A method according to claim 16 wherein the patterned background includes an approximately equal amount of light areas and dark areas.

24. (Currently Amended) A method according to claim 16 wherein the patterned background includes a number of parallel extending light areas and dark areas.

25. (Currently Amended) A method according to claim 16 wherein the patterned background includes a checkerboard pattern of light areas and dark areas.

26. (Currently Amended) A method according to claim [[1]] 16 wherein the light areas and/or dark areas each have a size that is smaller than the object.

27. (Currently Amended) A method according to claim [[1]] 16 wherein the determining step comprises the steps of:

determining a difference image by determining a difference in intensity between corresponding locations of the reference image and the live image; and

determining if at least a portion of the difference image includes a complement or inverse image of the object.

28. (Currently Amended) A method according to claim [[1]] 16 wherein the determining step comprises the steps of:

determining a difference image by determining a difference in intensity between corresponding locations of the reference image and the live image; and

determining if the intensity of at least part of the difference image exceeds a threshold value.

29. (Currently Amended) A method for detecting an object in an area, comprising:
providing a patterned background in the area, wherein the patterned background includes both light areas and dark areas with an intended interrelationship;

capturing a reference image of the area without the object present;

Appl. No. 10/757,674
Response Dated July 11, 2006
Reply to Office action dated April 11, 2006

capturing a live image of the area; and
determining if the object is present in the area by comparing the reference image and the live image.

30. (Currently Amended) A method according to claim [[14]] 29 wherein the area corresponds to an area of a floor, and the patterned background is fixed to the area of the floor.

31. (Currently Amended) A method according to claim [[15]] 30 wherein the patterned background is painted on the area of the floor.

32. (Currently Amended) An object detection system, comprising:
a patterned background fixed to an area, wherein the patterned background includes both light areas and dark areas with an intended interrelationship;

an image capture device for capturing a reference image of the area without the object present, and a live image of the area; and

a processing element for determining if the object is present in the area by comparing the reference image and the live image.

33. (Currently Amended) An object detection system according to claim [[17]] 32 wherein the area is at least part of a larger area.

Appl. No. 10/757,674
Response Dated July 11, 2006
Reply to Office action dated April 11, 2006

34. (Currently Amended) An object detection system according to claim [[18]] 33 wherein the larger area at least partially encircles an area to be monitored.

35. (Currently Amended) An object detection system according to claim [[19]] 33 wherein the larger area corresponds to an area to be monitored.

36. (Currently Amended) An object detection system according to claim [[17]] 32 wherein the area corresponds to a monitored area.

37. (Currently Amended) An object detection system according to claim [[17]] 32 wherein the patterned background includes an approximately equal amount of light areas and dark areas.

38. (Currently Amended) An object detection system according to claim [[17]] 32 wherein the patterned background includes a number of parallel extending light areas and dark areas.

39. (Currently Amended) An object detection system according to claim [[17]] 32 wherein the patterned background includes a checkerboard pattern of light areas and dark areas.

Appl. No. 10/757,674
Response Dated July 11, 2006
Reply to Office action dated April 11, 2006

40. (Currently Amended) An object detection system according to claim [[17]] 39 wherein the light areas and/or dark areas each have a size that is smaller than the object.